

## Exhibit I

N-acetyl Neuraminic Acid (Sialic Acid)

NeuNAc  $\alpha$  2,3Gal  $\beta$ 1,4GlcNAc

2' Sialic has NAe

( $\beta$ 1,4GalNAcT

F + II (3,5,7)

NeuNAc  $\alpha$  2,3Gal  $\beta$ 1,4GlcNAc

$\uparrow$   $\beta$ 1,4 /

GalNAc

NeuNAc  $\alpha$  2,3Gal  $\beta$ 1,4GlcNAc

$\uparrow$  3,2

Fucose

To Prepare TEA (HPLC)

2 M (TEA) Acetate pH 5.5

(one liter)

550 ml  $H_2O$

120 ml Glacial Acetic Acid (110/kit - 2M)

Titrate w/ Triethylamine to 5.5

150+ mls

Bring to 1 liter - filter thru Millipore filters  
(designed for HPLC reagents)

ET7 assays

Intn

0.5 1M Na cacodylate

7  
3.5

0.2 2M  $MgCl_2$

1.4

0.4 500mM L-fucose

2.8

1.0 100mM ATP

7.0

.8  $^{14}C$  GDP-fucose

5.6

$H_2O$   $\uparrow$  20

35.7

Stock of  
Sialyl  $\alpha$  2,3GalNAc Fw=675

50mM - 29.67 / 1mg

Cocktail

|        | cocktail | Extract | $H_2O$ - Acc | $H_2O$ + Acc (SLN 50mM) |
|--------|----------|---------|--------------|-------------------------|
| ET3 DL | 8.0      | 4.0     | 8            | 6 2                     |
| ET3 BK | 8.0      | 4.0     | 8            | 6 2                     |
| ET7 SN | 8.0      | 10.0    | 2            | 0 2                     |

Run Rxn 3 hrs 37°C,

Sulfated Acceptor

6.14 mg / 100  $\mu$ l

Partition ~~sp~~  $NaH_2PO_4$

18.7  $\mu$ l = 2.3mg

Calumn count

Spd of 20  $\mu$ l rxn

WED

14:05

Reaction counts

Appear to have  
WorkedPARAMETER GROUP: 1  
ID: 14-C 1 MINDry down remaining  
Portion of run  
& Put on HPLC

| POS | CTIME | CPM1                |
|-----|-------|---------------------|
| 001 | 00060 | 734.57 FT3 DC + Acc |
| 002 | 00060 | 398.40 FT3 DC -     |
| 003 | 00060 | 1617.20 FT3 OK +    |
| 004 | 00060 | 518.50 FT3 OK -     |
| 005 | 00060 | 1185.50 FT3 +       |
| 006 | 00060 | 368.40 FT3 -        |

| POS | CTIME | CPM1   |
|-----|-------|--------|
| 011 | 00060 | 468.50 |
| 012 | 00060 | 425.40 |
| 013 | 00060 | 417.96 |
| 014 | 00060 | 517.50 |
| 015 | 00060 | 482.50 |
| 016 | 00060 | 487.50 |

TOTAL COUNTS  
Spd

TOTAL COUNT RATE: 7621.9 CPM

From the HPLC Data  
the counts in FT7 (SN)  
Sample are only fucose  
this E prep is inactiveCells were transfected on 2/27 w/ mFT7 (1,2ab,3) and hFT3  
(SBc 125)Cells were FACS Analyzed on 2/30 - 4 plates each  
Stained w/ Lx: SLX + H

|      | H | SLX | Lx |
|------|---|-----|----|
| mFT7 | - | +   | -  |
| hFT3 | - | +   | +  |

as would expect

Make cell 1% Triton extract partition off  
Fucose Transferrase w/ SCH as acceptor

|                       | Cocktail extract | H <sub>2</sub> O - | +   | H <sub>2</sub> O |
|-----------------------|------------------|--------------------|-----|------------------|
| FT3                   | 10.5             | 2.5                | 2   |                  |
| FT7                   | 10.5             | 7.5                | 2   |                  |
| Previous FT3(B)       | 10.5             | 4.0                | 5.5 | 3.5              |
| Cocktail              | 4 minus          |                    |     |                  |
| 0.5 NaClO             | 2.0              |                    |     |                  |
| 0.2 2M NaCl           | 0.8              |                    |     |                  |
| 0.4 L-fucose          | 1.6              |                    |     |                  |
| 1.0 ATP               | 4.0              |                    |     |                  |
| 0.8 50% fucose        | 3.2              |                    |     |                  |
| 10.4 H <sub>2</sub> O | 40.4             |                    |     |                  |

All runs worked fine

Use this extract to  
Checkout Sulfated  
acceptor  
and run these  
on the HPLC

PARAMETER GROUP: 1  
ID: 14-C 1 MIN

| POS | CTIME | CPM1              |
|-----|-------|-------------------|
| 001 | 00060 | 6677.65 FT3B      |
| 002 | 00060 | 7989.80 FT3 (new) |
| 003 | 00060 | 1651.20 FT3       |
| 004 | 00060 | 746.80 - Acc      |
| 005 | 00060 | 1945.80 - Acc     |
| 006 | 00060 | 679.70 - Acc      |
| 007 | 00060 | 454.50            |
| 008 | 00060 | 457.50            |
| 009 | 00060 | 474.50            |
| 010 | 00060 | 454.50            |

| POS | CTIME | CPM1   |
|-----|-------|--------|
| 011 | 00060 | 409.40 |
| 012 | 00060 | 442.40 |

TOTAL COUNT RATE: 16383.8 CPM

Split of 20 µl into  
250 µl  
count 10

HPLC runs

Mock

Fucose

GDP fucose

SLX (Standard)

FT3 (new) rxn product

m FT7 reaction product - product signals w/  
SLX

Run FT assays w/ FT3 and SLX and Sulfated  
acceptor. The sulfated acceptor will not  
be recovered over  $\text{NaH}_2\text{PO}_4$  columns, analysis  
will be thru the HPLC separation

| FT assay |          | 50 mM   |     | 50 mM |                  | cocktail                 |      |
|----------|----------|---------|-----|-------|------------------|--------------------------|------|
|          | cocktail | Extract | SLX | Sul   | H <sub>2</sub> O |                          |      |
| FT3 - S1 | 13       | 5.0     | 2.0 |       |                  | $\text{Na}_2\text{CO}_3$ | 3.5  |
|          | Sul      | 13      | 5.0 |       | 2.0              | $\text{MnCl}_2$          | 1.4  |
|          | S2       | 13      | 5.0 | 2.0   |                  | Lfuc                     | 2.8  |
|          | -        | 13      | 5.0 |       |                  | ATP                      | 7.0  |
|          |          |         |     |       |                  | GDP fuc                  | 5.6  |
|          |          |         |     |       | 2.0              | H <sub>2</sub> O         | 53.2 |

HPLC Analysis

Mock

Fucose

GDP fucose

SLX

FT3/SLX

FT7 SLX

Acceptors  
[final] 5 mM